

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A closure device for sealing a percutaneous puncture in the wall of a blood vessel, comprising:

an inner member,

an outer member,

an insertion tool having a housing and an actuator which is operable in a first mode in which the actuator is configured for deployment of the inner member inside the vessel and operable in a second mode in which the actuator is configured for tamping the outer member on an outside of the vessel,

wherein the actuator is arranged to be set into said second mode in response to a pulling force acting on a filament connecting the inner member and the outer member,

wherein the actuator is configured to be both contacted and operated by a user in both the first and second modes,

[[and]] wherein in the second mode, movement of the actuator relative to the housing causes said tamping of the outer member, and

wherein the actuator includes an actuator portion that is configured to be directly contacted by the user in both the first and second modes.

2. (Currently Amended) The closure device of claim 1, further comprising a seal assembly;

wherein the housing is arranged to be positioned by a distal end of the housing for guidance of the seal assembly,

the seal assembly comprising said inner member, attached to a distal end of said filament and said outer member, movably carried on the filament and spaced from the inner member;

wherein the closure device further comprises:

a pusher, guided in the housing, a distal end of the pusher detachably connected to the inner member;

a tamping member, guided in the housing, the filament running through the tamping member and carrying the outer member and the inner member outside a distal end of the tamping member, and

an actuator mechanism controlling the actuator in said first mode to drive the pusher for deployment of the inner member, whereupon the actuator mechanism is adapted to disable the actuator until a pulling force acting on the filament causes the actuator to be set ~~[[reset]]~~ into said second mode to drive the tamping member for tamping the outer member.

3. (Previously Presented) The closure device of claim 2, further comprising:

a sleeve; and

a slider;

wherein the sleeve is telescopically received in the housing, the actuator is telescopically received in the sleeve, the seal assembly is operatively connected to the slider, and the slider is engaged by the actuator in a first relative position to be moved by the actuator for deployment of the inner member, and displaceable relative to the actuator into a second relative position wherein the slider is engaged by the actuator to be moved thereby for tamping the outer member.

4. (Previously Presented) The closure device of claim 3, wherein the slider is displaced from the first relative position to the second relative position in response to a pulling force being applied to the closure device and acting through the filament which is arrested by its distal end being attached to the inner member and by its proximal end being connected to the slider.

5. (Original) The closure device of claim 4, wherein the actuator is temporarily arrested in the sleeve and disabled in the second mode of operation, to be released by action of the slider as the slider is displaced from said first to said second relative position.

6. (Currently Amended) A closure device for sealing a percutaneous puncture in the wall of a blood vessel, comprising: The closure device of claim 5, further comprising:
an inner member,

an outer member,

an insertion tool having a housing and an actuator which is operable in a first mode in which the actuator is configured for deployment of the inner member inside the vessel and operable in a second mode in which the actuator is configured for tamping the outer member on an outside of the vessel,

wherein the actuator is arranged to be set into said second mode in response to a pulling force acting on a filament connecting the inner member and the outer member,

wherein the actuator is configured to be both contacted and operated by a user in both the first and second modes,

wherein in the second mode, movement of the actuator relative to the housing causes said tamping of the outer member,

a seal assembly;

wherein the housing is arranged to be positioned by a distal end of the housing for guidance of the seal assembly,

the seal assembly comprising said inner member, attached to a distal end of said filament and said outer member, movably carried on the filament and spaced from the inner member;

wherein the closure device further comprises:

a pusher, guided in the housing, a distal end of the pusher detachably connected to the inner member;

a tamping member, guided in the housing, the filament running through the tamping member and carrying the outer member and the inner member outside a distal end of the tamping member, and

an actuator mechanism controlling the actuator in said first mode to drive the pusher for deployment of the inner member, whereupon the actuator mechanism is adapted to disable the actuator until a pulling force acting on the filament causes the actuator to be set into said second mode to drive the tamping member for tamping the outer member;

a sleeve;

a slider;

wherein the sleeve is telescopically received in the housing, the actuator is telescopically received in the sleeve, the seal assembly is operatively connected to the slider,

and the slider is engaged by the actuator in a first relative position to be moved by the actuator for deployment of the inner member, and displaceable relative to the actuator into a second relative position wherein the slider is engaged by the actuator to be moved thereby for tamping the outer member;

wherein the slider is displaced from the first relative position to the second relative position in response to a pulling force being applied to the closure device and acting through the filament which is arrested by its distal end being attached to the inner member and by its proximal end being connected to the slider;

wherein the actuator is temporarily arrested in the sleeve and disabled in the second mode of operation, to be released by action of the slider as the slider is displaced from said first to said second relative position;

a cam formed on a distal end of the slider and arranged to disengage a snap lock connection between the actuator and the sleeve; and a compressible spring, acting between the sleeve and the actuator, effective for ejecting the actuator into said second mode.

7. (Original) The closure device of claim 6, wherein the closure device is configured so that said pusher is released from the slider in response to the actuator being reset into said second mode.

8. (Original) The closure device of claim 7, further comprising a cam-and-hook formed on the actuator and arranged to disengage a snap lock connection between the slider and the pusher, and further to retract the pusher by the displacement of the slider relative to the actuator.

9. (Currently Amended) A closure device for sealing a percutaneous puncture in the wall of a blood vessel, comprising: ~~The closure device of claim 4,~~

an inner member,

an outer member,

an insertion tool having a housing and an actuator which is operable in a first mode in which the actuator is configured for deployment of the inner member inside the vessel and

operable in a second mode in which the actuator is configured for tamping the outer member on an outside of the vessel,

wherein the actuator is arranged to be set into said second mode in response to a pulling force acting on a filament connecting the inner member and the outer member,

wherein the actuator is configured to be both contacted and operated by a user in both the first and second modes, and

wherein in the second mode, movement of the actuator relative to the housing causes said tamping of the outer member,

a seal assembly;

wherein the housing is arranged to be positioned by a distal end of the housing for guidance of the seal assembly,

the seal assembly comprising said inner member, attached to a distal end of said filament and said outer member, movably carried on the filament and spaced from the inner member;

wherein the closure device further comprises:

a pusher, guided in the housing, a distal end of the pusher detachably connected to the inner member;

a tamping member, guided in the housing, the filament running through the tamping member and carrying the outer member and the inner member outside a distal end of the tamping member, and

an actuator mechanism controlling the actuator in said first mode to drive the pusher for deployment of the inner member, whereupon the actuator mechanism is adapted to disable the actuator until a pulling force acting on the filament causes the actuator to be set into said second mode to drive the tamping member for tamping the outer member;

a sleeve;

a slider;

wherein the sleeve is telescopically received in the housing, the actuator is telescopically received in the sleeve, the seal assembly is operatively connected to the slider, and the slider is engaged by the actuator in a first relative position to be moved by the actuator for deployment of the inner member, and displaceable relative to the actuator into a

second relative position wherein the slider is engaged by the actuator to be moved thereby for tamping the outer member;

wherein the slider is displaced from the first relative position to the second relative position in response to a pulling force being applied to the closure device and acting through the filament which is arrested by its distal end being attached to the inner member and by its proximal end being connected to the slider;

wherein the actuator is temporarily arrested in the sleeve and disabled in the second mode of operation, to be released by action of the slider as the slider is displaced from said first to said second relative position;

wherein the proximal end of the filament is connected to the slider by a sliding connection having a bar, and captured by a beam formed on the sleeve so as to be released from the slider through relative movement of the beam as the slider moves with the actuator in said second mode.

10. (Previously Presented) The closure device of claim 1, wherein the distal end of the housing is associated with an insertion tube and a forward portion connected thereto, wherein said forward portion of the housing has separate passageways for a seal assembly and for a guiding member, respectively, said passageways converging into the insertion tube, and wherein said seal assembly comprises said inner member and said outer member.

11. (Original) The closure device of claim 10, wherein the housing, the forward portion, and the insertion tube are integrally formed.

12. (Previously Presented) The closure device of claim 1, further comprising:

a sleeve;

a slider; and

a seal assembly comprising said inner member and said outer member,

wherein the sleeve is telescopically received in the housing, the actuator is telescopically received in the sleeve, the seal assembly is operatively connected to the slider, and the slider is engaged by the actuator in a first relative position to be moved by the actuator for deployment of the inner member, and displaceable relative to the actuator into a

second relative position wherein the slider is engaged by the actuator to be moved thereby for tamping the outer member.

13. (Previously Presented) The closure device of claim 1, further comprising an actuator mechanism configured to control the actuator in said first mode for deploying the inner member, and configured to disable the actuator after deploying the inner member until a pulling force acting on the filament causes the actuator to be reset into said second mode for tamping the outer member.

14. (Previously Presented) The closure device of claim 1, further comprising a pusher, guided in the housing, a distal end of the pusher detachably connected to the inner member, wherein in said first mode, said pusher is engaged with said actuator, and wherein in said second mode, said pusher is disengaged from said actuator.

15. (Original) The closure device of claim 1, wherein said first and second modes are non-overlapping.

16. (Original) The closure device of claim 1, wherein the closure device is configured for one-hand operation from said first mode to said second mode.

17. (Withdrawn) A method for sealing a percutaneous puncture in the wall of a blood vessel, comprising:

providing an insertion tool having a housing and an actuator which is operable in a first mode in which the actuator is configured for deployment of an inner member inside the vessel and operable in a second mode in which the actuator is configured for tamping an outer member on an outside of the vessel, wherein the actuator is arranged to be set into said second mode in response to a pulling force acting on a filament connecting the inner member and the outer member;

operating said insertion tool in said first mode;

pulling said filament so as to set said actuator in said second mode; and

operating said insertion tool in said second mode by moving the actuator relative to the housing to cause said tamping while the housing supports the actuator.

18. (Withdrawn) The method of claim 17, wherein the step of operating the insertion tool in said first mode disables operation of the insertion tool in said second mode, until the step of pulling said filament sets the actuator into said second mode.

19. (Previously Presented) The closure device of claim 1, wherein the actuator's position is automatically shifted when it is set in said second mode to provide an indication of the actuator being set in said second mode.

20. (Previously Presented) The closure device of claim 1, wherein the device comprises the outer member and wherein the outer member comprises a locking member.

21. (Previously Presented) The closure device of claim 1, wherein the device comprises the inner member and wherein the inner member comprises an inner seal.

22. (Currently Amended) A closure device for sealing a percutaneous puncture in the wall of a blood vessel, comprising:

an inner member,

an outer member,

an insertion tool having a housing and an actuator which is operable in a first mode in which the actuator is configured for deployment of the inner member inside the vessel and operable in a second mode in which the actuator is configured for tamping the outer member on an outside of the vessel,

wherein the actuator is arranged to be set into said second mode in response to a pulling force acting on a filament connecting the inner member and the outer member,

wherein the housing supports the actuator in both the first and second modes,

wherein the insertion tool comprises a mechanism configured such that, when the actuator is set in said second mode, a separate operation of the actuator moves the outer member along the filament and towards the inner member and tamps the outer member,

wherein the actuator includes an actuator portion that is configured to be directly contacted by a user in both the first and second modes.

23. (Previously presented) The closure device of claim 22, wherein the insertion tool comprises the same parts in both the first and second modes.

24. (Previously presented) The closure device of claim 22, wherein the actuator's position is automatically shifted when it is set in said second mode to provide an indication of the actuator being set in said second mode.

25. (Previously presented) The closure device of claim 22, wherein the device comprises the outer member and wherein the outer member comprises a locking member.

26. (Previously presented) The closure device of claim 22, wherein the device comprises the inner member and wherein the inner member comprises an inner seal.

27. (Previously presented) The closure device of claim 22, wherein the actuator comprises a first actuator member for deployment of the inner member and a second actuator member for tamping the outer member.

28. (Previously presented) The closure device of claim 1, wherein the actuator comprises a first actuator member for deployment of the inner member and a second actuator member for tamping the outer member.

29. (Previously Presented) The closure device of claim 1, further comprising a tamping member.

30. (Previously Presented) The closure device of claim 29, wherein the actuator is configured to be actuated in the second mode to tamp the outer member with the tamping

member by contacting the outer member on an outside of the vessel with the tamping member.

31. (Previously Presented) The closure device of claim 22, further comprising a tamping member.

32. (Previously Presented) The closure device of claim 31, wherein the actuator is configured to be actuated in the second mode to tamp the outer member with the tamping member by contacting the outer member on an outside of the vessel with the tamping member.